

REMARKS/ARGUMENTS

Claims 1, 3, 4, 6, 9-11, 15, 17, and 18 have been amended; Claims 5 and 8 have been cancelled, without prejudice or disclaimer; and new Claims 21 and 22 have been added; therefore, Claims 1-4, 6, 7, 9-22 are pending. Applicant appreciates the courtesies extended by Examiner Deane during a telephonic interview held on January 26th. Accordingly, Applicant has carefully considered the application in view of the Examiner's Action, and, in light of the foregoing amendments and the following remarks, respectfully requests reconsideration and full allowance of all pending claims.

The specification and figures have been amended to correct minor typographical errors, and to bring the specification and figures into conformity with each other. Specifically, with respect to the drawings, Figure 1 has been amended to add the reference numeral 10 for the communication system, the reference numeral 36 for the transmit circuitry, and the reference numerals 82 and 84 for lines extending from the weighting value selector 85, and to delete a duplicate reference numeral 86. It is noted that the amendment of the equation at page 22, line 13, corrects a typographical error which would, upon a review of the specification, be obvious to a person of ordinary skill in the art of Bayesian estimators. It is therefore respectfully submitted that the foregoing amendments correct minor typographical errors and bring the specification and figures into conformity with each other, and accordingly add no new matter to the application as originally filed. In view of the foregoing, it is respectfully requested that the amendments made to the drawings and selected paragraphs of the specification be entered and replace the respective drawings and paragraphs originally filed with the application.

Claims 1-20 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Pub. No. 2002/0009156 to Hottinen et al. (hereinafter "*Hottinen*"). In response, Applicant has cancelled Claims 5 and 8, without prejudice or disclaimer, rendering the rejection thereof moot, and has amended independent Claims 1 and 15 such that they now clearly distinguish and are patentable over the cited references.

Specifically, independent Claim 1 has been amended to more particularly point out and distinctly claim one of the distinguishing characteristics of the present invention, namely, that the branch metric is determined with reference to the signal-to-noise ratio. This amendment is

supported by σ^2 , recited at page 22, line 13, of the specification as originally filed, and it is submitted that σ^2 is well known to persons skilled in the art as a symbol to represent the signal-to-noise ratio, therefore adding no new matter to the application as originally filed.

Independent Claim 15 has been amended to more particularly point out and distinctly claim one of the distinguishing characteristics of the present invention, namely, that the branch metric is determined with reference to the ratio of traffic channel amplitude to the amplitude of the pilot channel. This amendment is supported by γ , recited at page 22, line 13, of the specification as originally filed, and it is submitted that γ is well known to persons skilled in the art as a symbol to represent the ratio of traffic channel amplitude to the amplitude of the pilot channel, therefore adding no new matter to the application as originally filed.

Hottinen has been cited as fully disclosing Applicant's invention as recited in Claims 1 and 15. *Hottinen*, however, fails to teach or even suggest determining a branch metric with reference to either the signal-to-noise ratio or the ratio of traffic channel amplitude to the amplitude of the pilot channel, as now recited in Claims 1 and 15, respectively, as amended.

In view of the foregoing, it is apparent that *Hottinen* fails to teach or suggest the unique combination now recited in independent Claims 1 and 15. It is therefore respectfully submitted that Claims 1 and 15 clearly and precisely distinguish over *Hottinen* in a patentable sense, and are therefore allowable over that reference and the remaining references of record. Accordingly, it is respectfully requested that the rejection of Claims 1 and 15 under 35 U.S.C. § 102(e) as being anticipated by *Hottinen* be withdrawn.

Claims 3, 4, 6, 9-11, 17, and 18 have been amended to correct dependencies and minor typographical errors, and such amendments add no new matter to the application as originally filed. New Claim 21 is supported by Claim 9, as originally filed, and adds no new matter to the application as originally filed. New Claim 22 is supported by Claims 1, 5, and 8, as originally filed, and at page 22, line 13, of the application as originally filed, adds no new matter to the application as originally filed. Claims 2-4, 6, 7, 9-14, and 16-22 depend from and further limit independent Claims 1 and 15, in a patentable sense, and, for this reason and the reasons set forth above, are also deemed to be in condition for allowance. Accordingly, it is respectfully

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REPLY TO OFFICE ACTION OF NOVEMBER 3, 2004

requested that the rejections of dependent Claims 2-4, 6, 7, 9-14, and 16-20 be withdrawn, as well.

Applicant has reviewed the prior art made of record and not relied on, and has concluded that this art does not prejudice the patentability of the invention as defined by the present claims. For this reason and the reason that they have not been applied against Applicant's claims, no further discussion of them is deemed necessary.

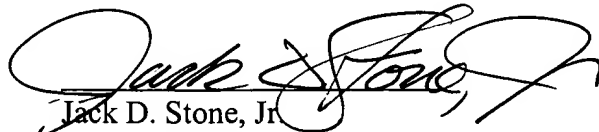
Applicant does not believe any fees are due; however, in the event that any fees are due, the Commissioner is hereby authorized to charge any required fees due (other than issue fees), and to credit any overpayment made, in connection with the filing of this paper to Deposit Account No. 50-2032 of Scheef & Stone, L.L.P.

Applicant has now made an earnest attempt to place this application in condition for allowance. Therefore, Applicant respectfully requests, for the reasons set forth herein and for other reasons clearly apparent, full allowance of Claims 1-4, 6, 7, 9-22 so that the application may be passed to issue.

Should the Examiner have any questions or desire clarification of any sort, or deem that any further amendment is desirable to place this application in condition for allowance, the Examiner is invited to telephone the undersigned at the number listed below.

Respectfully submitted,

SCHEEF & STONE, L.L.P.

A handwritten signature in black ink, appearing to read "Jack D. Stone, Jr.", with a stylized flourish at the end.

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Amendments to the Drawings:

The attached sheet of drawings includes changes to Fig. 1. This sheet replaces the original sheet including Fig. 1. Changes to Fig. 1 consist of the addition and deletion of selected reference numerals as appropriate to conform the drawings with the specification of the application as originally filed.

Attachment: Replacement Sheet